Hetis H81

Personal Computer

MS-B073 System

G52-B0731X1

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Copyright Notice

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- MSI is a registered trademark of Micro-Star Int'l Co., Ltd.
- Intel is a registered trademark of Intel Corporation.
- Windows is a registered trademark of Microsoft Corporation.
- Realtek is a registered trademark of Realtek Semiconductor Corporation.
- PS/2 is registered trademark of International Business Machines Corporation.

Revision

Revision	Date
V1.0	2013/ 08

Upgrade and Warranty

Please note that certain components preinstalled in the product may be upgradable or replaceable by user's request. To learn more about upgrade limitation, please refer to the specifications in the User's Manual. For any further information about the product users purchased, please contact the local dealer. Do not attempt to upgrade or replace any component of the product if you are not an authorized dealer or service center, since it may cause the warranty void. It is strongly recommended that you contact the authorized dealer or service center for any upgrade or replace service.

Acquisition of Replaceable Parts

Please be noticed that the acquisition of replaceable parts (or compatible ones) of the product users purchased in certain countries or territories may be fulfilled by the manufacturer within 5 years at most since the product has been discontinued, depending on the official regulations declared at the time.

Please contact the manufacturer via **http://support.msi.com/** for the detailed information about the acquisition of spare parts.

Technical Support

If a problem arises with your system and no solution can be obtained from the user's manual, please contact your place of purchase or local distributor. Alternatively, please try the following help resources for further guidance.

- Visit the MSI website for technical guide, BIOS updates, driver updates and other information via **http://www.msi.com/service/download/**
- Contact our technical staff via **http://support.msi.com/**

Green Product Features

- Reduced energy consumption during use and stand-by
- Limited use of substances harmful to the environment and health
- Easily dismantled and recycled
- Reduced use of natural resources by encouraging recycling
- Extended product lifetime through easy upgrades
- Reduced solid waste production through take-back policy

Environmental Policy

- The product has been designed to enable proper reuse of parts and recycling and should not be thrown away at its end of life.

- Users should contact the local authorized point of collection for recycling and disposing of their end-of-life products.
- Visit the MSI website and locate a nearby distributor for further recycling information.
- Users may also reach us at gpgreenteam@msi.com for information regarding proper Disposal, Take-back, Recycling, and Disassembly of MSI products.

Safety Instructions

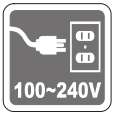
Read the safety instructions carefully and thoroughly.

All cautions and warnings on the equipment or user's manual should be noted.

Keep the User's Guide that comes with the package for future reference.

Keep this equipment away from humidity and high temperature.

Lay this equipment on a reliable flat surface before setting it up.



- Make sure that the power voltage is within its safety range and has been adjusted properly to the value of 100~240V before connecting the equipment to the power outlet. Do not disable the protective earth pin from the plug. The equipment must be connected to an earthed mains socket-outlet.
- Always unplug the AC power cord before installing any add-on card or module to the equipment.
- Always disconnect the AC power cord or switch the wall socket off if the equipment would be left unused for a certain time to achieve zero energy consumption.

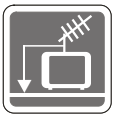
The ventilator on the enclosure is used for air convection and to prevent the equipment from overheating. Do not cover the ventilator.

Do not leave the equipment in an unconditioned environment with a storage temperature above 60°C (140°F) or below 0°C (32°F), which may damage the equipment.

NOTE: The maximum operating temperature is around 35°C.

Never pour any liquid into the opening that could damage or cause electrical shock.

Place the power cord in a way that people are unlikely to step on it. Do not place anything on the power cord.



When installing the coaxial cable to the TV Tuner, it is necessary to ensure that the metal shield is reliably connected to protective earthing system of the building.

Cable distribution system should be grounded (earthed) in accordance with ANSI/NFPA 70, the National Electrical Code (NEC), in particular Section 820.93, Grounding of Outer Conductive Shield of a Coaxial Cable.

Always keep the strong magnetic or electrical objects away from the equipment.

If any of the following situations arises, get the equipment checked by service personnel:

- The power cord or plug is damaged.
- Liquid has penetrated into the equipment.
- The equipment has been exposed to moisture.
- The equipment does not work well or you can not get it work according to user's manual.
- The equipment has dropped and damaged.
- The equipment has obvious sign of breakage.

1. The optical storage devices are classified as CLASS 1 LASER PRODUCT. Use of controls or adjustments or performance of procedures other than those specified is prohibited.
2. Do not touch the lens inside the drive.

廢電池請回收

For better environmental protection, waste batteries should be collected separately for recycling or special disposal.

CAUTION:

Danger of explosion if battery is incorrectly replaced. Replace only with the same or equivalent type recommended by the manufacturer.

CE Conformity

Hereby, Micro-Star International CO., LTD declares that this device is in compliance with the essential safety requirements and other relevant provisions set out in the European Directive.

FCC-B Radio Frequency Interference Statement

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the measures listed below:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/television technician for help.

Notice 1

The changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Notice 2

Shielded interface cables and AC power cord, if any, must be used in order to comply with the emission limits.

VOIR LA NOTICE D'INSTALLATION AVANT DE RACCORDER AU RESEAU.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

1. this device may not cause harmful interference, and
2. this device must accept any interference received, including interference that may cause undesired operation.

WEEE Statement

(English) Under the European Union (“EU”) Directive on Waste Electrical and Electronic Equipment, Directive 2002/96/EC, which takes effect on August 13, 2005, products of “electrical and electronic equipment” cannot be discarded as municipal waste anymore and manufacturers of covered electronic equipment will be obligated to take back such products at the end of their useful life.

(French) (Français) Au sujet de la directive européenne (EU) relative aux déchets des équipement électriques et électroniques, directive 2002/96/EC, prenant effet le 13 août 2005, que les produits électriques et électroniques ne peuvent être déposés dans les décharges ou tout simplement mis à la poubelle. Les fabricants de ces équipements seront obligés de récupérer certains produits en fin de vie.

(German) (Deutsch) Gemäß der Europäischen Union (“EU”) Richtlinie über Elektro-und Elektronik-Altgeräte (Richtlinie 2002/96/EG) mit Wirkung vom 13. August 2005, dürfen Elektro- und Elektronikgeräten nicht mehr als Hausmüll entsorgt werden. Der Hersteller verpflichtet sich zur Rücknahme solcher Produkte am Ende ihrer Nutzungsdauer.

(Spanish) (Español) Bajo la directiva 2002/96/EC de la Unión Europea en materia de desechos y/o equipos electrónicos, con fecha de rigor desde el 13 de agosto de 2005, los productos clasificados como “eléctricos y equipos electrónicos” no pueden ser depositados en los contenedores habituales de su municipio, los fabricantes de equipos electrónicos, están obligados a hacerse cargo de dichos productos al termino de su período de vida.

(Italian) (Italiano) In base alla Direttiva dell’Unione Europea (EU) sullo Smaltimento dei Materiali Elettrici ed Elettronici, Direttiva 2002/96/EC in vigore dal 13 Agosto 2005, prodotti appartenenti alla categoria dei Materiali Elettrici ed Elettronici non possono più essere eliminati come rifiuti municipali: i produttori di detti materiali saranno obbligati a ritirare ogni prodotto alla fine del suo ciclo di vita.

(Russian) (Русский) В соответствии с директивой Европейского Союза (ЕС) по предотвращению загрязнения окружающей среды использованным электрическим и электронным оборудованием (директива WEEE 2002/96/EC), вступающей в силу 13 августа 2005 года, изделия, относящиеся к электрическому и электронному оборудованию, не могут рассматриваться как бытовой мусор, поэтому производители вышеперечисленного электронного оборудования обязаны принимать его для переработки по окончании срока службы.

(Turkish) (Türkçe) Avrupa Birliği (AB) Kararnamesi Elektrik ve Elektronik Malzeme Atığı, 2002/96/EC Kararnamesi altında 13 Ağustos 2005 tarihinden itibaren geçerli olmak üzere, elektrikli ve elektronik malzemeler diğer atıklar gibi çöpe atılamayacak ve bu elektonik cihazların üreticileri, cihazların kullanım süreleri bittikten sonra ürünleri geri toplamakla yükümlü olacaktır.

(Greek) (Ελληνικά) Σύμφωνα με την Οδηγία 2002/96/ΕΚ της Ευρωπαϊκής Ένωσης («ΕΕ») περί Απόρριψης Ηλεκτρικού και Ηλεκτρονικού Εξοπλισμού (WEEE), η οποία λαμβάνει ισχύ στις 13 Αυγούστου 2005, τα προϊόντα «ηλεκτρικού και ηλεκτρονικού εξοπλισμού» δεν είναι δυνατόν να απορριφθούν πλέον ως κοινά απορρίμματα και οι κατασκευαστές κεκαλυμμένου ηλεκτρονικού εξοπλισμού είναι υποχρεωμένοι να πάρουν πίσω αυτά τα προϊόντα στο τέλος της ωφέλιμης ζωής τους.

(Polish) (Polski) Zgodnie z Dyrektywą Unii Europejskiej (“UE”) dotyczącą odpadów produktów elektrycznych i elektronicznych (Dyrektywa 2002/96/EC), która wchodzi w życie 13 sierpnia 2005, tzw. “produkty oraz wyposażenie elektryczne i elektroniczne “ nie mogą być traktowane jako śmieci komunalne, tak więc producenci tych produktów będą zobowiązani do odbierania ich w momencie gdy produkt jest wycofywany z użycia.

(Hungarian) (Magyar) Az Európai Unió („EU”) 2005. augusztus 13-án hatályba lépő, az elektromos és elektronikus berendezések hulladékairól szóló 2002/96/EK irányelve szerint az elektromos és elektronikus berendezések többé nem kezelhetőek lakossági hulladékként, és az ilyen elektronikus berendezések gyártói kötelessé válnak az ilyen termékek visszavételére azok hasznos élettartama végén.

(Czech) (Čeština) Podle směrnice Evropské unie (“EU”) o likvidaci elektrických a elektronických výrobků 2002/96/EC platné od 13. srpna 2005 je zakázáno likvidovat “elektrické a elektronické výrobky” v běžném komunálním odpadu a výrobci elektronických výrobků, na které se tato směrnice vztahuje, budou povinni odebírat takové výrobky zpět po skončení jejich životnosti.

(Traditional Chinese) (繁體中文) 歐盟已制訂有關廢電機電子設備法令，亦即自2005年8月13日生效的2002/96/EC，明文規定「電機電子設備產品」不可再以都市廢棄物處理，且所有相關電子設備製造商，均須在產品使用壽命結束後進行回收。

(Simplified Chinese) (简体中文) 欧盟已制订有关废电机电子设备法令，亦即自2005年8月13日生效的2002/96/EC，明文规定「电机电子设备产品」不可再以都市废弃物处理，且所有相关电子设备制造商，均须在产品使用寿命结束后进行回收。

(Japanese) (日本語) 2005年8月13日以降にEU加盟国を流通する電気・電子製品にはWEEE指令によりゴミ箱に×印のリサイクルマークの表示が義務づけられており、廃棄物として捨てることの禁止とリサイクルが義務づけられています。

(Korean) (한국어) 2005년 8월 13일자로 시행된 폐전기전자제품에 대한 유럽연합(“EU”) 지침, 지침 2002/96/EC에 의거하여, “전기전자제품”은 일반 쓰레기로 폐기할 수 없으며 제품의 수명이 다하면 해당 전자제품의 제조업체가 이러한 제품을 회수할 책임이 있습니다.

(Vietnam) (Tieng Viet) Theo Hướng dẫn của Liên minh Châu Âu (“EU”) về Thiết bị điện & điện tử đã qua sử dụng, Hướng dẫn 2002/96/EC, vốn đã có hiệu lực vào ngày 13/8/2005, các sản phẩm thuộc “thiết bị điện và điện tử” sẽ không còn được vứt bỏ như là rác thải đô thị nữa và các nhà sản xuất thiết bị điện tử tuân thủ hướng dẫn sẽ phải thu hồi các sản phẩm này vào cuối vòng đời.

(Thai) (ไทย) ภายใต้ข้อกำหนดของสหภาพยุโรป (“EU”) เกี่ยวกับของเสียจากอุปกรณ์ไฟฟ้าและอิเล็กทรอนิกส์ เลขที่ 2002/96/EC ซึ่งมีผลบังคับใช้ตั้งแต่วันที่ 13 สิงหาคม 2005 ผู้ใช้ไม่สามารถทิ้งผลิตภัณฑ์ที่เป็น “อุปกรณ์ไฟฟ้าและอิเล็กทรอนิกส์” ปะปนกับของเสียทั่วไปของชุมชนได้อีกต่อไป และผู้ผลิตอุปกรณ์อิเล็กทรอนิกส์ดังกล่าวจะถูกบังคับให้นำผลิตภัณฑ์ดังกล่าวกลับคืนเมื่อสิ้นสุดอายุการใช้งานของผลิตภัณฑ์

(Indonesia) (Bahasa Indonesia) Sesuai dengan Regulasi Uni Eropa ("UE") perihal WEEE (Limbah Peralatan Listrik dan Elektronik), Directive 2002/96/EC, yang berlaku sejak 13, 2005, produk "peralatan listrik dan elektronik" tidak lagi dapat dibuang sebagai sampah umum dan pabrik peralatan elektronik diwajibkan untuk mengambil kembali produk tersebut pada saat masa pakainya habis.

(Serbian) (Srpski) Po Direktivi Evropske unije ("EU") o odbačenoj ekektronskoj i električnoj opremi, Direktiva 2002/96/EC, koja stupa na snagu od 13. Avgusta 2005, proizvodi koji spadaju pod "elektronsku i električnu opremu" ne mogu više biti odbačeni kao običan otpad i proizvođači ove opreme biće prinuđeni da uzmu natrag ove proizvode na kraju njihovog uobičajenog veka trajanja.

(Netherlands) (Nederlands) De richtlijn van de Europese Unie (EU) met betrekking tot Vervuiling van Electrische en Electronische producten (2002/96/EC), die op 13 Augustus 2005 in zal gaan kunnen niet meer beschouwd worden als vervuiling. Fabrikanten van dit soort producten worden verplicht om producten retour te nemen aan het eind van hun levenscyclus.

(Romanian) (Română) În baza Directivei Uniunii Europene ("UE") privind Evacuarea Echipamentului Electric și Electronic, Directiva 2002/96/EC, care intră în vigoare pe 13 august, 2005, produsele din categoria "echipament electric și electronic" nu mai pot fi evacuate ca deșeuri municipale, iar fabricanții echipamentului electronic vizat vor fi obligați să primească înapoi produsele respective la sfârșitul duratei lor de utilizare.

(Portuguese) (Português) De acordo com a Directiva 2002/96/EC de Resíduos de Equipamentos Eléctricos e Electrónicos da União Europeia (UE), efectiva desde o 13 de Agosto do ano 2005, os produtos de "equipamento eléctrico e electrónico" não podem ser descartados como resíduo municipal e os fabricantes do equipamento electrónico sujeitos a esta legislação estarão obligados a recolhar estes produtos ao finalizar sua vida útil.

(Swedish) (Svenska) Under Europeiska unionens ("EU") Weee-direktiv (Waste Electrical and Electronic Equipment), Direktiv 2002/96/EC, vilket trädde i kraft 13 augusti, 2005, kan inte produkter från "elektriska och elektroniska utrustningar" kastas i den vanliga hushållssoporna längre och tillverkare av inbyggd elektronisk utrustning kommer att tvingas att ta tillbaka sådan produkter när de är förbrukade.

(Finnish) (Suomi) Euroopan unionin (EU) 13.8.2005 voimaan tulleen sähkö- ja elektroniikkalaiteromua koskevan direktiivin 2002/96/EY mukaisesti "sähkö- ja elektroniikkalaitteita" ei saa enää hävittää talousjätteiden mukana. Direktiivin alaisen sähkö- tai elektroniikkalaitteen valmistajan on otettava laitteet takaisin niiden käyttöiän päättyessä.

(Slovak) (Slovenčina) Na základe smernice Európskej únie („EU") o elektrických a elektronických zariadeniach číslo 2002/96/ES, ktorá vstúpila do platnosti 13. augusta 2005, výrobky, ktorými sú „elektrické a elektronické zariadenia" nesmú byť zneškodňované spolu s komunálnym odpadom a výrobcovia patričných elektronických zariadení sú povinní takéto výrobky na konci životnosti prevziať naspäť.

(Slovenian) (Slovenščina) Skladno z določili direktive Evropske unije ("EU") o odpadni električni in elektronski opremi, Direktiva 2002/96/ES, ki je veljavna od 13. avgusta, izdelkov "električne in elektronske opreme" ni dovoljeno odstranjevati kot običajne komunalne odpadke, proizvajalci zadevne elektronske opreme pa so zavezani, da tovrstne izdelke na koncu njihove življenjske dobe sprejmejo nazaj.

(Danish) (Dansk) I henhold til direktiv fra den europæiske union (EU) vedrørende elektrisk og elektronisk affald , Direktiv 2002/96/EC, som træder i kraft den 13. august 2005, må produkter som “elektrisk og elektronisk udstyr” ikke mere bortskaffes som kommunalt affald. Producenter af det pågældende, elektroniske udstyr vil være forpligtet til at tage disse produkter tilbage ved afslutningen på produkternes levetid.

(Norwegian) (Norsk) Under den europeiske unionens (“EU”) direktiv om deponering av elektronisk og elektrisk utstyr, direktiv 2002/96/EC, som trer i effekt 13. august 2005, kan ikke produkter av “elektronisk og elektrisk ustyr” lenger deponeres som husholdningsavfall og fabrikantene av disse produktene er forpliktet å ta tilbake slike produkter ved slutten av produktets levetid.

(Bulgarian) (български) Според директивата на Европейския съюз относно отпадъците от електрическо и електронно оборудване, директива 2002/96/EC, важаща от 13 август, 2005 г., електрическо и електронно оборудване не може да се изхвърля заедно с битовите отпадъци и производителите на такова оборудване са задължени да приемат обратно съответните продукти в края на експлоатационния им период.

(Croatian) (Hrvatski) U okviru Direktive Europske Unije (“EU”) o Otpadnim električnim i elektroničkim uređajima, Direktiva 2002/96/EC, koja je na snazi od 13. kolovoza 2005., “električni i elektronički uređaji” se ne smiju više bacati zajedno s kućnim otpadom i proizvođači su obvezni zbrinuti takve proizvode na kraju njihovog životnog vijeka.

(Estonia) (Eesti) Vastavalt Euroopa Liidu (“EL”) direktiivile 2002/96/EÜ (elektri- ja elektroonikaseadmete jäätmete kohta), mis jõustus 13. augustil 2005, on keelatud kodumajapidamiste “elektri- ja elektroonikaseadmete” jäätmete hävitamine koos majapidamisjäätmetega, ja elektri- ja elektroonikaseadmete tootjad on kohustatud sellised tooted pärast nende kasutuselt kõrvaldamist tagasi võtma.

(Persian) (فارسی)

اتحادیه اروپا) که از تاریخ 13 آگوست سال 2005 میلادی قابل اجراست ، کلیه شرکت های 2002/96/ECبر طبق قانون دفع زباله های الکتریکی و الکترونیکی (بند تولید کننده موظف به جمع آوری زباله محصولات خود پس از پایان دوره مصرف می باشند.

(Arabic) (العربية)

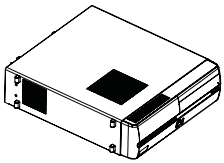
في إطار اتفاقية الإتحاد الأوربي ("الإتحاد الأوربي") التوجيه بشأن نفايات المعدات و الأجهزة الكهربائية والإلكترونية، توجيه 2002/96/EC للمجموعة الأوربية، الذى أصبح ساري المفعول في 13 أغسطس/آب، 2005، ان منتجات "أجهزة كهربائية وإلكترونية" لا يمكن التخلي عنها بوصفها نفايات، ومنتجو المعدات الالكترونية سيكون لزاما عليهم استرداد مثل هذه المنتجات في نهاية مدة صلاحيتها.

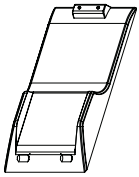
Chapter 1

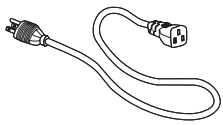
Overview

Congratulations for purchasing the Hetis H81 (MS-B073) System. This system is your best slim PC choice. With the fantastic appearance and ultrasmall form factor, it can easily be set anywhere. The feature packed platform also gives you an exciting PC experience.

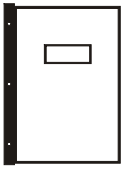
Packing Contents


Hetis H81


Stand


AC Power Cord

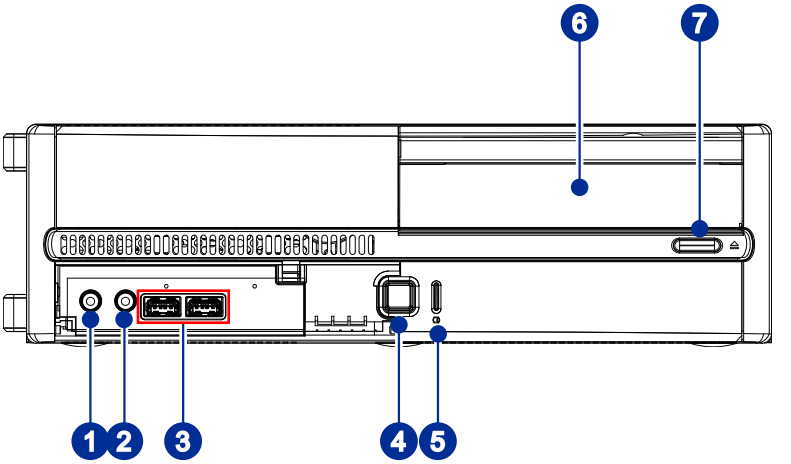
Driver/ Utility Disk


User Manual

** Please contact us immediately if any of the items is damaged or missing.*
** The illustrations are for reference only and your packing contents may slightly vary depending on the model you purchased.*

System Overview

➤ Front View



1 **Headphone Jack**
This connector is provided for headphones or speakers.

2 **Microphone Jack**
This connector is provided for microphones.

3 **USB 3.0 Port**
The USB (Universal Serial Bus) port is for attaching USB devices such as keyboard, mouse, or other USB-compatible devices. It supports up to 5Gbit/s (SuperSpeed) data transfer rate. The USB 3.0 port is backward-compatible with USB 2.0 devices.

4 **Power Button/ LED**
Press the power button to turn the system on and off. The power LED glows when the system is turned on and goes off when the system is shut down. In terms of power saving, the LED blinks in S3 (Suspend to RAM) mode and goes off in S4 (Suspend to Disk) mode. Pressing the system power button will wake the system up from power saving mode.

5 **Hard Disk Drive LED**
This indicator shows the activity status of the HDD. It flashes when the system is accessing data on the HDD and remains off when no disk activity is detected.

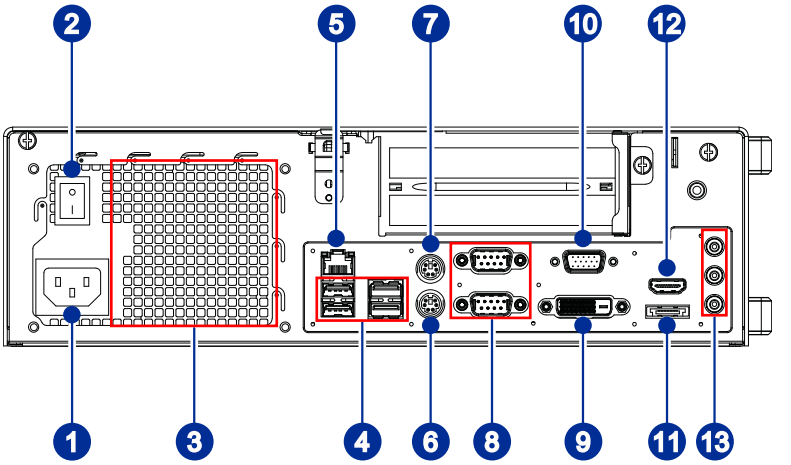
6 **Optical Disk Drive**
A DVD Super-Multi drive is integrated for your home entertainment. (Blu-ray is optional.)

7 **Eject Button**
Press the eject button to open and close the optical disk drive.

Important

High-speed devices are recommended for USB 3.0 ports whereas low-speed devices, such as mouse or keyboard, are suggested to be plugged into the USB 2.0 ports on the rear panel.

➤ Rear View



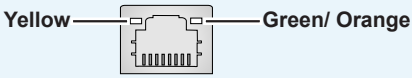
1 **Power Jack**
Power supplied through this jack supplies power to your system.

2 **Power Switch**
Press the power switch to turn the power supply on and off. The “on” position is the solid line and the “off” position is the circle. Make sure the power supply switch to the “on” position before you press the power button to turn on your system.

3 **Ventilator**
The ventilator on the enclosure is used for air convection and to prevent the equipment from overheating. Do not cover the ventilator.

4 **USB 2.0 Port**
The USB (Universal Serial Bus) port is for attaching USB devices such as keyboard, mouse, or other USB-compatible devices. It supports up to 480Mbit/s (Hi-Speed) data transfer rate.

5 **LAN Jack**
The standard RJ-45 LAN jack is provided for connection to the Local Area Network (LAN). You can connect a network cable to it.



LED	Color	LED State	Condition
Left	Yellow	Off	LAN link is not established.
		On (steady state)	LAN link is established.
		On (brighter & pulsing)	The computer is communicating with another computer on the LAN.
Right	Green	Off	10 Mbit/sec data rate is selected.
		On	100 Mbit/sec data rate is selected.
	Orange	On	1000 Mbit/sec data rate is selected.

6 **Keyboard Port**
The standard PS/2 keyboard DIN connector is for a PS/2 keyboard.

7 **Mouse Port**
The standard PS/2 mouse DIN connector is for a PS/2 mouse.

8 **Serial Port (Optional)**
The serial port supports barcode scanners, barcode printers, bill printers, credit card machine, etc.

9 **DVI Port**
The DVI (Digital Visual Interface) connector allows you to connect a LCD monitor. It provides a high-speed digital interconnection between the computer and its display device. To connect an LCD monitor, simply plug your monitor cable into the DVI connector, and make sure that the other end of the cable is properly connected to your monitor (refer to your monitor manual for more information.)

10 **VGA Port**
The DB15-pin female port is provided for monitor.

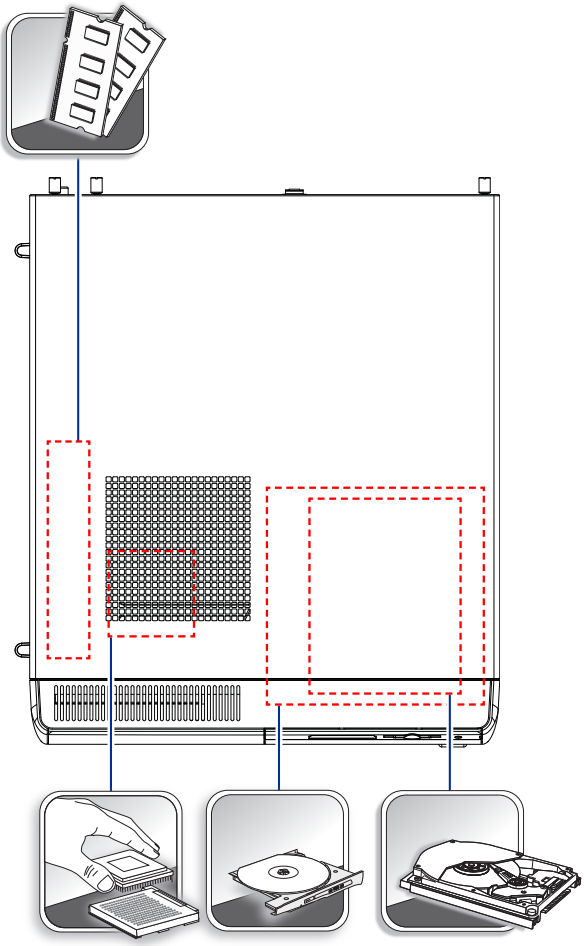
11 **eSATA Port**
The eSATA (External Serial ATA) port is provided for attaching the eSATA external hard drive.

12 **HDMI Port**
The High-Definition Multimedia Interface (HDMI) is an all-digital audio/video interface capable of transmitting uncompressed streams. HDMI supports all TV format, including standard, enhanced or high-definition video, plus multi-channel digital audio on a single cable.

13 **Audio Jack**
Line-In (Blue) is used for external CD player, tapeplayer or other audio devices.
Line-Out (Green) is used for speakers or headphones.
Mic (Pink) is used for microphones.

Component Replacement & Upgrade

Please note that certain components preinstalled in the product may be upgradable or replaceable by user's request depending on the models users purchased.



To learn more about upgrade limitation, please refer to the specifications in the User's Manual. For any further information on the product users purchased, please contact the local dealer.

Do not attempt to upgrade or replace any component of the product if you are not an authorized dealer or service center, since it may cause the warranty void. It is strongly recommended that you contact the authorized dealer or service center for any upgrade or replace service.

Chapter 2

Getting Started

This chapter provides you with the information on hardware setup procedures. While connecting peripheral devices, be careful in holding the devices and use a grounded wrist strap to avoid static electricity.

Safety & Comfort Tips

The Hetis H81 is a portable platform that allows you to work anywhere. However, choosing a good workspace is important if you have to work with your PC for a long period of time.

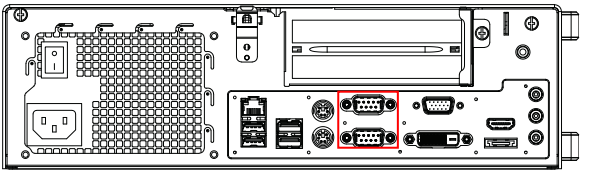
1. Your work area should have enough illumination.
2. Choose the proper desk and chair and adjust their height to fit your posture when operating.
3. When sitting on the chair, sit straight and keep a good posture. Adjust the chair's back (if available) to support your back comfortably.
4. Place you feet flat and naturally on the floor, so that your knees and elbows have the proper position (about 90-degree) when operating.
5. Put your hands on the desk naturally to support your wrists.
6. Avoid using your PC in a place where discomfort may occur (such as on the bed).
7. The Hetis H81 is an electrical device. Please treat it with great care to avoid personal injury.

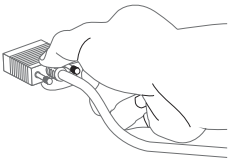
Connecting Peripheral Devices

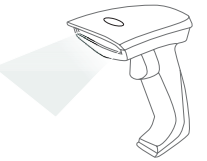
The I/O (input/output) ports on the rear panel allow you to connect peripheral devices. All devices listed here are for reference only.

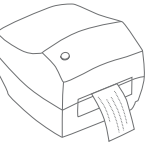
➤ Connecting Serial Devices

Serial ports are commonly used in applications such as industrial automation systems, scientific analysis, shop till systems and some industrial/consumer products. Users may connect barcode scanners, barcode printers, bill printers, and credit card machine to this serial port.







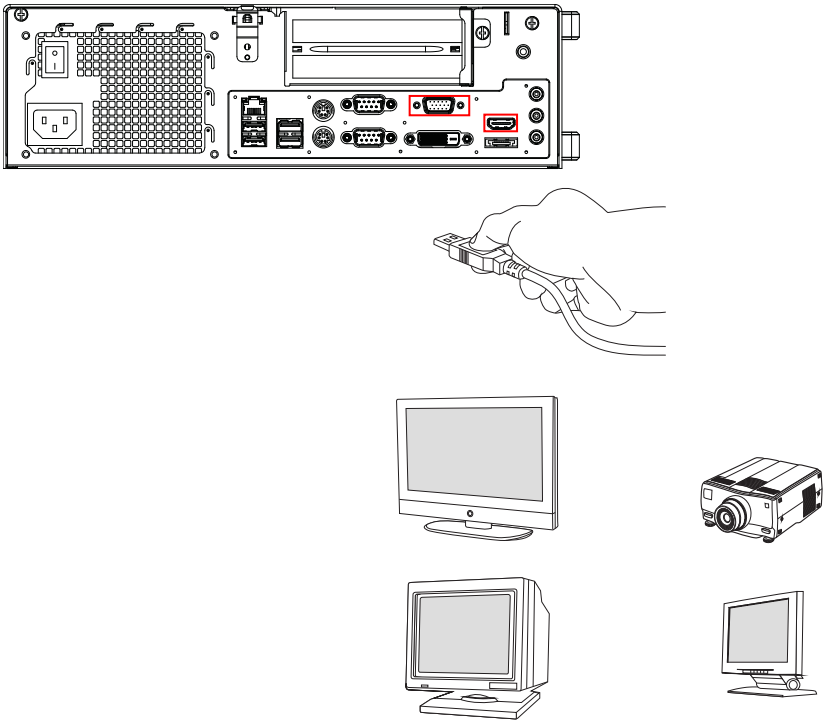


➤ Connecting VGA-Out & HDMI-Out Devices

This Hetis H81 provides a VGA port and an HDMI port for connection to external monitors, projectors, set-top boxes, DVD players, digital video cameras, mini notebooks, digital cameras, etc.

VGA (Video Graphics Array) is a graphics display system for PCs. VGA connectors and their associated cabling are always used solely to carry analog video signals along with digital clock and data.

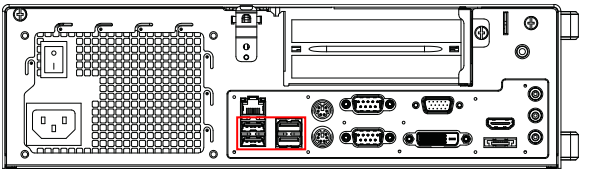
HDMI (High Definition Multimedia Interface) is a new interface standard for PCs, displays and consumer electronics devices that supports standard, enhanced and high-definition video, plus multi-channel digital audio on a single cable.

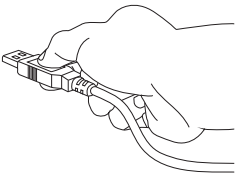


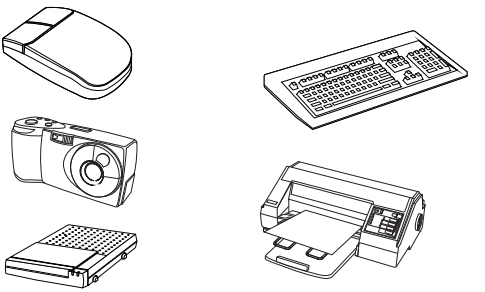
To connect the VGA/ HDMI device, first make sure the Hetis H81 and the targeted device are both powered off, and then connect the cable of the device to the VGA/ HDMI port of your Hetis H81.

➤ Connecting the USB Devices

This Hetis H81 provides USB ports for connecting various USB devices, such as mouse, keyboard, digital camera, webcam, printer, external optical storage device,.. and etc. To connect these devices, install the drivers for each device first if necessary, and then connect the device to the Hetis H81. This Hetis H81 is capable of auto detecting the USB devices installed, and if there is no detection of the devices, please manually enable the USB devices by going to Start Menu / Control Panel / Add Hardware to add the new device.



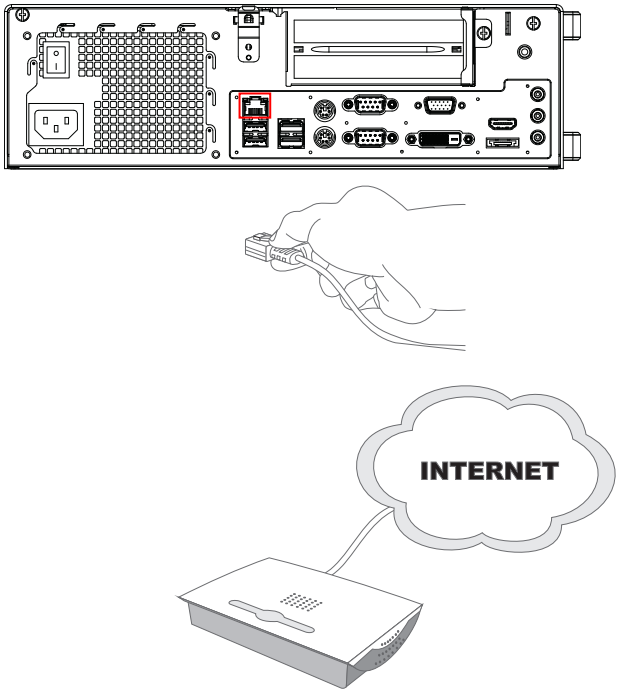




➤ Connecting the Network Device

The RJ-45 connector of the Hetis H81 allows you to connect the LAN (local area network) devices, such as a hub, switch and gateway, to build a network connection.

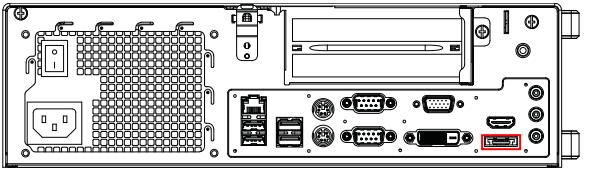
For more instructions or detailed steps on connecting to the LAN, please ask your MIS staff or network manager for help.

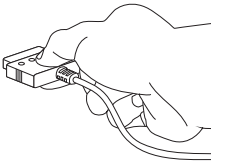


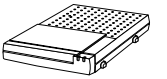
➤ Connecting the External SATA Hard Disk Drive

The eSATA Connector allows you to connect an external Serial ATA hard disk device. The eSATA standard interface supports “plug-and-play” technology, so that you can connect and remove the eSATA devices without turning off the Hetis H81.

To connect the eSATA hard disk device, simply connect the cable of the device to the eSATA Connector of your Hetis H81.







Hardware Setup

➤ Connecting the AC Power

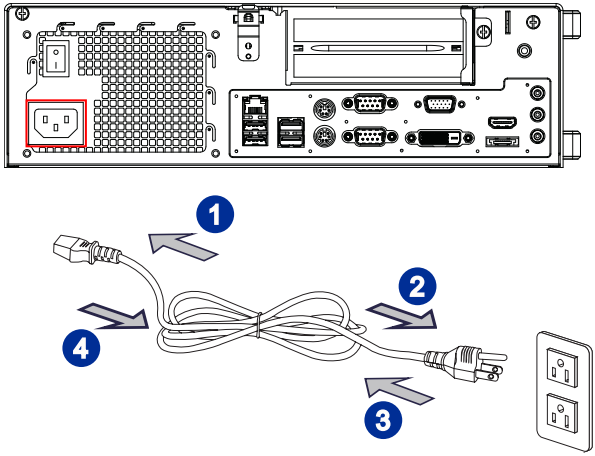
1. Unpack the package to find the AC power cord. Plug one end of the AC power cord to the Hetis H81.

2. Plug the male end to the electrical outlet.

➤ Disconnecting the AC Power

3. Unplug the AC power cord from the electrical outlet first.

4. Unplug the AC power cord from the Hetis H81.

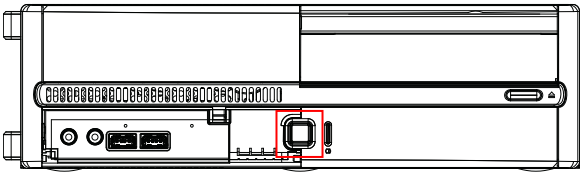


Important

When unplugging the AC power cord, always hold the connector part of the cord. Never pull the cord directly!

➤ Powering on the System

Press the power button to power on the system.



Chapter 3

System Operations

This chapter provides you with essential information on system operations.

Important

All information is subject to change without prior notice.

Power Management

Power management of personal computers (PCs) and monitors has the potential to save significant amounts of electricity as well as deliver environmental benefits.

To be energy efficient, turn off your display or set your PC to sleep mode after a period of user inactivity.

➤ Power Management in Windows 7

- [Power Options] in Windows OS allow you to control the power management features of your display, hard drive, and battery. Go to [Start] > [Control Panel] > [System and Security].

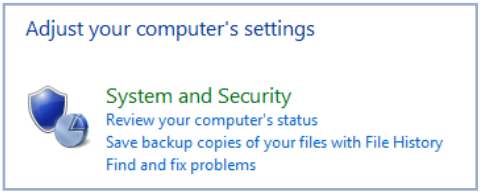
Then click on the [Power Options] link.

Select a power plan that suits your personal needs. You may also fine-tune the settings by clicking [Change plan settings].

- The Shut Down Computer menu presents the options of Sleep (S3/S4) & Shut Down (S5) for rapid and easy management of your system power.

➤ Power Management in Windows 8

- [Power Options] in Windows OS allow you to control the power management features of your display, hard drive, and battery. Go to [Start] > [Control Panel] > [System and Security].


Adjust your computer's settings
System and Security
Review your computer's status
Save backup copies of your files with File History
Find and fix problems

Then click on the [Power Options] link.

Select a power plan that suits your personal needs. You may also fine-tune the settings by clicking [Change plan settings].

- The Shut Down Computer menu presents the options of Sleep (S3/S4) & Shut Down (S5) for rapid and easy management of your system power.

➤ Power Management through ENERGY STAR qualified monitors (Optional)

ENERGY STAR

The power management feature allows the computer to initiate a low-power or “Sleep” mode after a period of user inactivity. When used with an external ENERGY STAR qualified monitor, this feature also supports similar power management features of the monitor. To take advantage of these potential energy savings, the power management feature has been preset to behave in the following ways when the system is operating on AC power:

- Turn off the display after 15 minutes
- Initiate Sleep after 30 minutes

➤ Waking the System Up

The computer shall be able to wake up from power saving mode in response to a command from any of the following:

- the power button,
- the network (Wake On LAN),
- the mouse,
- the keyboard.

Energy Saving Tips:

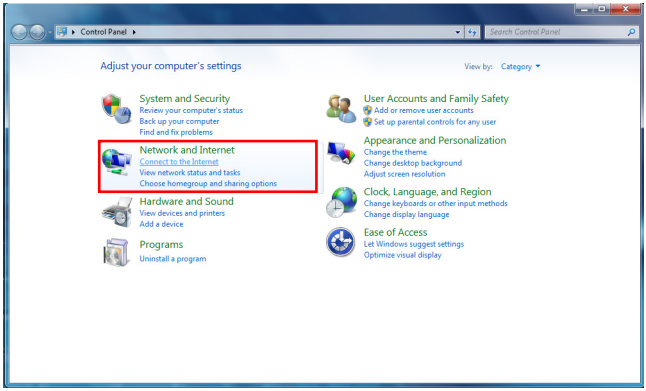
- Turn off the monitor by pressing the LCD power button after a period of user inactivity.
- Tune the settings in Power Options under Windows OS to optimize your PC’s power management.
- Install power saving software to manage your PC’s energy consumption.
- Always disconnect the AC power cord or switch the wall socket off if your PC would be left unused for a certain time to achieve zero energy consumption.

Network Connection (Windows 7)

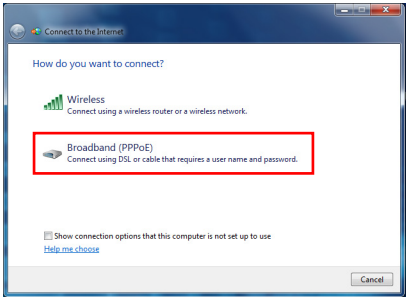
➤ Wired LAN

1. Go to [Start] > [Control Panel].

2. Select [Connect to the Internet] under [Network and Internet].



3. Select [Broadband (PPPoE)] to connect using DSL or cable that requires a user name and password.


Connect to the Internet
How do you want to connect?
Wireless
Connect using a wireless router or a wireless network.
Broadband (PPPoE)
Connect using DSL or cable that requires a user name and password.
Show connection options that this computer is not set up to use
Help me choose
Cancel

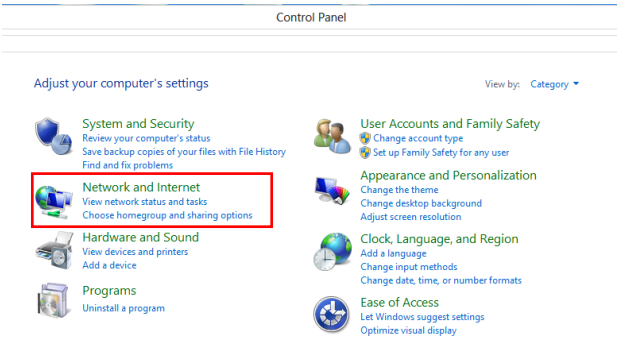
4. Type the information from your Internet Service Provider (ISP) and click [Connect] to establish your LAN connection.

Network Connection (Windows 8)

➤ Wired LAN

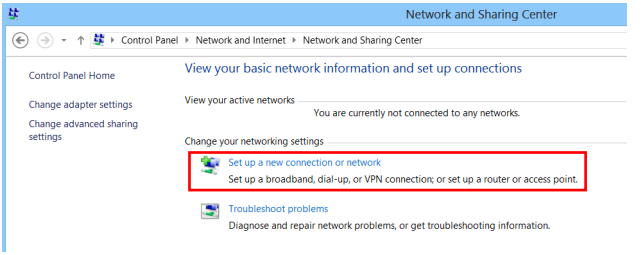
1. Go to [Start] > [Control Panel].

2. Select [View network status and tasks] under [Network and Internet].



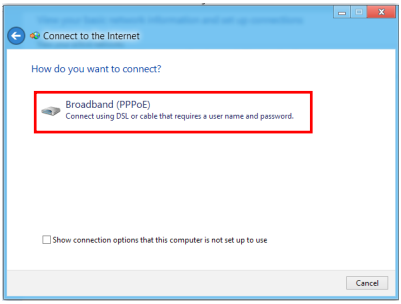
3. To establish a new connection, select [Network and Sharing Center].

4. Select [Set up a new connection or network].

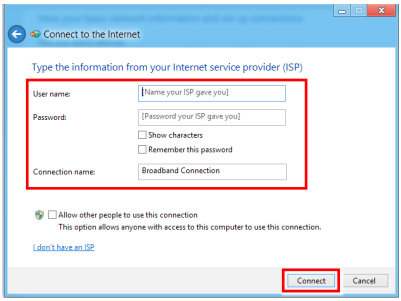

Network and Sharing Center
Control Panel ▸ Network and Internet ▸ Network and Sharing Center
Control Panel Home
Change adapter settings
Change advanced sharing settings
View your basic network information and set up connections
View your active networks
You are currently not connected to any networks.
Change your networking settings
Set up a new connection or network
Set up a broadband, dial-up, or VPN connection; or set up a router or access point.
Troubleshoot problems
Diagnose and repair network problems, or get troubleshooting information.

5. Choose [Connect to the Internet].

6. Select [Broadband (PPPoE)] to connect using DSL or cable that requires a user name and password.


Connect to the Internet
How do you want to connect?
Broadband (PPPoE)
Connect using DSL or cable that requires a user name and password.
Show connection options that this computer is not set up to use
Cancel

7. Type the information from your Internet Service Provider (ISP) and click [Connect] to establish your LAN connection.


Connect to the Internet
Type the information from your Internet service provider (ISP)
User name:
[Name your ISP gave you]
Password:
[Password your ISP gave you]
Show characters
Remember this password
Connection name:
Broadband Connection
Allow other people to use this connection
This option allows anyone with access to this computer to use this connection.
I don't have an ISP
Connect
Cancel

System Recovery (Windows 7)

Important

The Recovery Tool is only available on systems bundled with Windows OS and MSI utilities by default.

The purposes for using the Recovery Tool may include:

- Restore the system back to the initial status of original manufacturer's default settings.
- When some errors have occurred to the operating system in use.
- When the operating system is affected by virus and is not able to work normally.
- When you want to install the OS with other built-in languages.

Before using the Recovery Tool, please back up the important data saved on your system drive to other storage devices.

If the following solution fails to recover your system, please contact the authorized local distributor or service center for further assistance.

➤ Recovering the System with the F3 Hotkey

If the system encounters non-recoverable problems, it is always recommended that you try the F3 hotkey to recover your system with the recovery partition of the hard disk drive first.

Follow the instructions below to continue:

1. Restart the system.
2. Press the F3 hotkey on the keyboard when the following image appears.

3. Enter the Recovery Tool. This tool contains three features: Backup System, Restore System and Recover to factory default.

➤ System Backup

It is highly recommended that users back up the system as the solution in the event of a catastrophic disk failure or other accidents.

Follow the instructions below to continue:

1. Select [Backup System] to enter. Alternatively, select [X] or press [Esc] on the keyboard to exit.

2. Select [BACKUP] to start the system backup immediately.

▣ The Initial Backup

The initial backup may take a while. Please let it complete without interruption.

▣ Subsequent Backups

Subsequent backups will replace the previous backup files.

MSI RECOVERY TOOL
Backup System
Estimated size of the image file : 2.56G
Disk space : 1.68G
Previous backup time : 2011-10-10 09:32:02
The backup will replace the previous backup file.
BACKUP
CANCEL

3. The system backup is in progress. Please note that it may take a while. Do not switch off the power, or it may cause unknown damage to the system.

4. Alternatively, select [CANCEL] to stop the system backup immediately. Please do not switch off the power while the system backup cancellation is in progress.

5. The following message indicates a successful system backup. Press [OK] to finish.

➤ System Restore

This tool helps to return the system to a previous state with the backup files that users created and saved in the hard disk drive beforehand. If no backup files are available, the system will be restored to the default setup.

Follow the instructions below to continue:

1. Select [Restore System] to enter. Alternatively, select [X] or press [Esc] on the keyboard to exit.

2. Select [OK] or [NEXT] so that the system can recover to the previous backup or default setup. Alternatively, select [CANCEL] to stop the system restore immediately.

▣ With backup files: restoring the system to the previous backup

▣ Without backup files: restoring the system to the default setup

msi RECOVERY TOOL
Restore System
No image files in the backup
Select "Next " so that the system can recover to the default setup.
NEXT
CANCEL

3. The system restore is in progress. Please note that it may take a while. Do not switch off the power, or it may cause unknown damage to the system.

4. The following message indicates a successful system restore. Press [OK] to finish. Restart the system and access the Windows operating system as usual. If the restore process fails or is interrupted, please start the whole procedure all over again.

➤ System Recovery

This tool helps to recover the system back to factory default settings. All data on the HDD will be erased while all settings will be restored to factory default.

Follow the instructions below to continue:

1. Select [Recover to factory default] to enter. Alternatively, select [X] or press [Esc] on the keyboard to exit.

2. The system will be recovered to factory settings. All data will be gone. Make sure all important data have been backed up. Select [NEXT] to continue. Alternatively, select [CANCEL] to stop.

msi RECOVERY TOOL
Recover to factory default
The system will recover to the default status after recovery.
All the data will be gone. Please backup important files.
NEXT
CANCEL

3. Please select [OK] so that the system can recover its default setup.

4. The system recovery is in progress. Please note that it may take a while. Do not switch off the power, or it may cause unknown damage to the system.

5. The following message indicates a successful system recovery. Press [OK] to finish. Restart the system and access the Windows operating system as usual. If the recovery process fails or is interrupted, please start the whole procedure all over again.

System Recovery (Windows 8)

Important

The System Recovery Function is only available on systems bundled with Windows OS and MSI utilities by default.

The purposes for using the System Recovery Function may include:

- Restore the system back to the initial status of original manufacturer's default settings.
- When some errors have occurred to the operating system in use.
- When the operating system is affected by virus and is not able to work normally.
- When you want to install the OS with other built-in languages.

Before using the System Recovery Function, please backup the important data saved on your system drive to other storage devices.

If the following solution fails to recover your system, please contact the authorized local distributor or service center for further assistance.

➤ Creating System Recovery Discs

For the first-time use, it is highly recommended that users create system recovery discs as the backup solution in the event of a catastrophic disk failure or other accidents.

Double-click the "BurnRecovery" icon on the desktop to launch the Recovery Disc Creation Tool. Follow the on-screen instructions to create all recovery discs.

➤ Recovering the System with the Recovery Discs

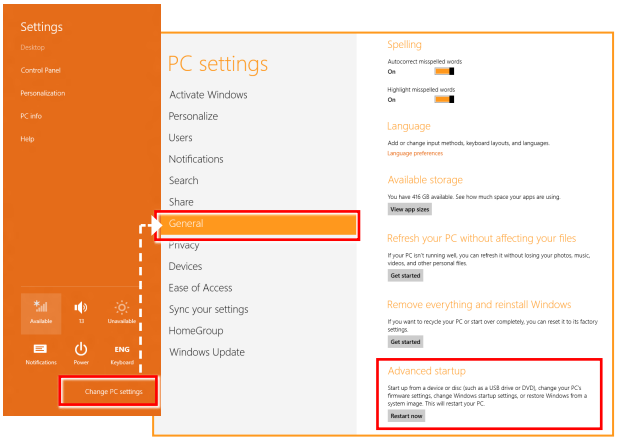
This section is meant for users to restore your system with the recovery discs that you created beforehand.

Follow the instructions below to continue:

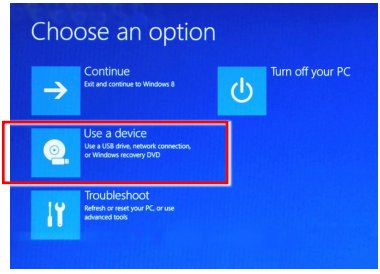
1. Insert the recovery disc into the optical disc drive.

2. Select [Settings]

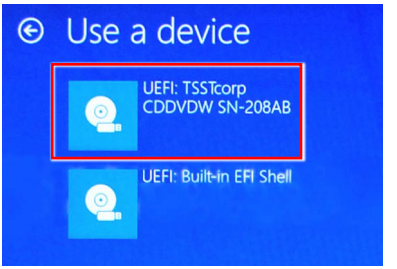
on Desktop, then “Change PC settings” to enter PC settings main page > General > Advanced startup, and click [Restart now] to restart the system.


Settings
Desktop
Control Panel
Personalization
PC info
Help
Change PC settings
PC settings
Activate Windows
Personalize
Users
Notifications
Search
Share
General
Privacy
Devices
Ease of Access
Sync your settings
HomeGroup
Windows Update
Spelling
Autocorrect misspelled words
On
Highlight misspelled words
On
Language
Add or change input methods, keyboard layouts, and languages.
Language preferences
Available storage
You have 416 GB available. See how much space your apps are using.
View app sizes
Refresh your PC without affecting your files
If your PC isn't running well, you can refresh it without losing your photos, music, videos, and other personal files.
Get started
Remove everything and reinstall Windows
If you want to recycle your PC or start over completely, you can reset it to its factory settings.
Get started
Advanced startup
Start up from a device or disc (such as a USB drive or DVD), change your PC's firmware settings, change Windows startup settings, or restore Windows from a system image. This will restart your PC.
Restart now

3. After booting up, following screen will pop up, select the [Use a device] to continue.


Choose an option
Continue
Exit and continue to Windows 8
Turn off your PC
Use a device
Use a USB drive, network connection, or Windows recovery DVD
Troubleshoot
Refresh or reset your PC, or use advanced tools

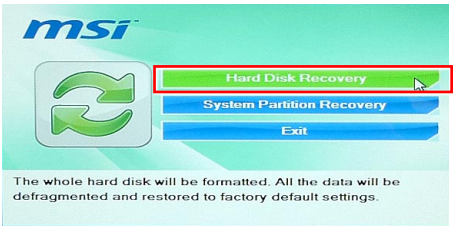
4. Select recovery disc the boot device.



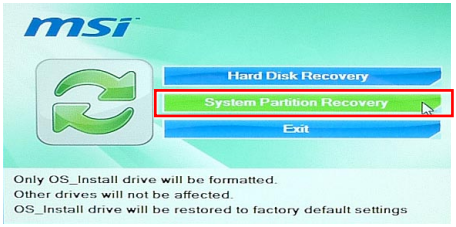
5. Press any key to reconfirm the selection when the following message appears.

6. The Windows OS starts loading files.

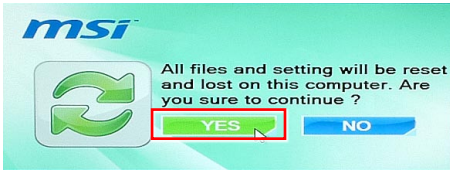
7. The system recovery menu pops up. [Hard Disk Recovery] will format the whole HDD. All data on the HDD will be erased while all settings will be restored to manufacturer default. Select [Hard Disk Recovery] only when your HDD is infected with fatal viruses and no solution can be found except a clear cleanup of the HDD.


msi
Hard Disk Recovery
System Partition Recovery
Exit
The whole hard disk will be formatted. All the data will be defragmented and restored to factory default settings.

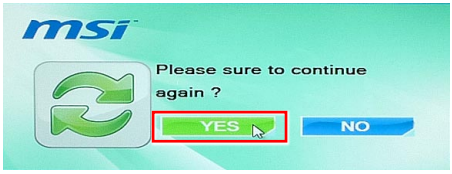
[System Partition Recovery] will format the C drive only. Only the C drive will be restored to manufacturer default. Other drives will not be affected. It is highly recommended that users select [System Partition Recovery] to restore the system.


msi
Hard Disk Recovery
System Partition Recovery
Exit
Only OS_Install drive will be formatted.
Other drives will not be affected.
OS_Install drive will be restored to factory default settings

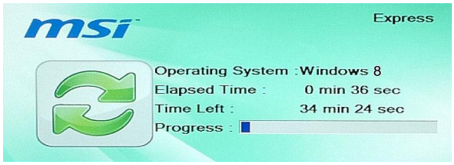
8. The system recovery will format your HDD partition. Make sure that the important data have been backed up. Click [YES] to continue; click [NO] to stop the system recovery.



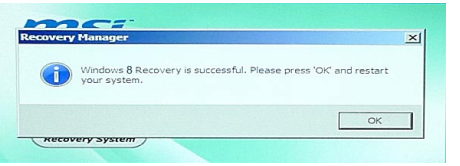
Click [YES] again to reconfirm; click [NO] to stop the system recovery.



9. DO NOT turn off the system power while performing the system recovery function, or it may cause unknown damage to the system.



10. The following message indicates successful system recovery. Press [OK] to restart the system and access the Windows operating system as usual.



11. If the recovery process is interrupted or failed, please repeat the recovery procedures from the beginning.

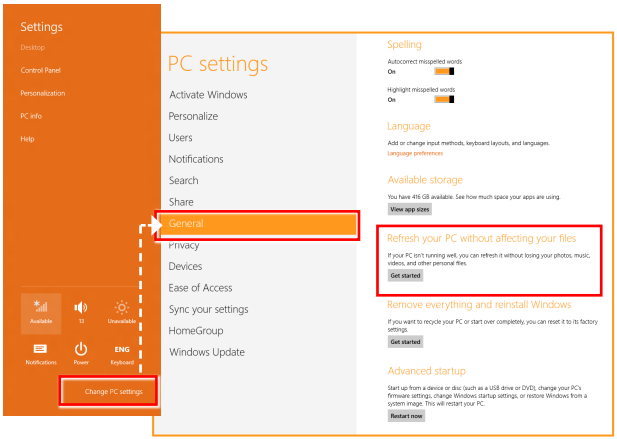
➤ Recovery from the Operating System

▣ Refresh PC

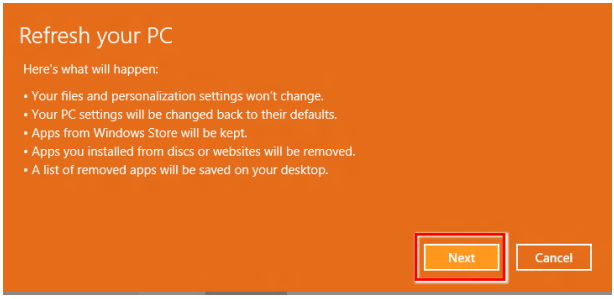
The Refresh PC utility checks whether the system files, Windows registry, and other important system components are working fine or not; on finding issues with Windows files, it will attempt to repair your PC. If your PC isn't running well, you can refresh it without losing your personal files.

1. Select [Settings]

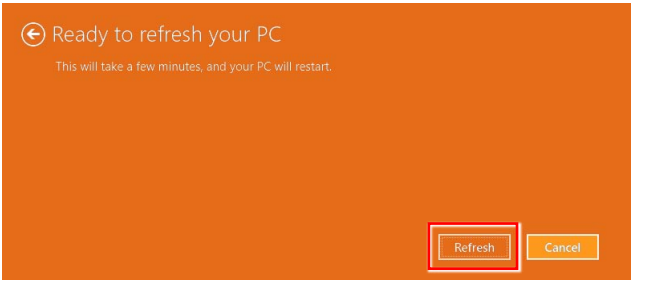
on Desktop, then "Change PC settings" to enter PC settings main page > General > Refresh your PC without affecting your files, and click [Get started].


Settings
Desktop
Control Panel
Personalization
PC info
Help
Change PC settings
PC settings
Activate Windows
Personalize
Users
Notifications
Search
Share
General
Privacy
Devices
Ease of Access
Sync your settings
HomeGroup
Windows Update
Spelling
Autocorrect misspelled words
On
Highlight misspelled words
On
Language
Add or change input methods, keyboard layouts, and languages.
Language preferences
Available storage
You have 416 GB available. See how much space your apps are using.
View app sizes
Refresh your PC without affecting your files
If your PC isn't running well, you can refresh it without losing your photos, music, videos, and other personal files.
Get started
Remove everything and reinstall Windows
If you want to recycle your PC or start over completely, you can reset it to its factory settings.
Get started
Advanced startup
Start up from a device or disc (such as a USB drive or DVD), change your PC's firmware settings, change Windows startup settings, or restore Windows from a system image. This will restart your PC.
Restart now

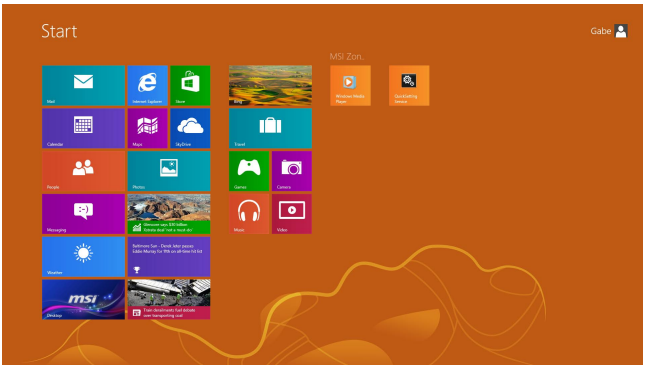
2. It will show the changes which will be made during the process, click [Next] to continue.


Refresh your PC
Here's what will happen:
• Your files and personalization settings won't change.
• Your PC settings will be changed back to their defaults.
• Apps from Windows Store will be kept.
• Apps you installed from discs or websites will be removed.
• A list of removed apps will be saved on your desktop.
Next
Cancel

3. A message indicates that your PC is ready to be refreshed, click [refresh] to start. This might take a while.



4. After the refresh process ends, you will be back to Windows Start Screen where you can find all default Windows 8 utilities and widgets.

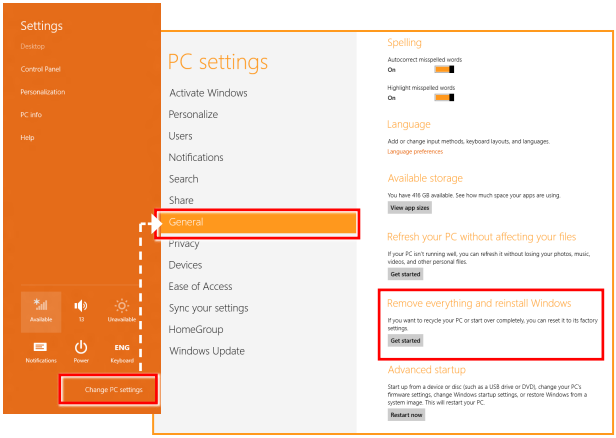


Reset PC

The Reset utility will bring the system back to original factory settings.

1. Select [Settings]

on Desktop, then “Change PC settings” to enter PC settings main page > General > Remove everything and reinstall Windows, and click [Get started].


Settings
Desktop
Control Panel
Personalization
PC info
Help
Change PC settings
PC settings
Activate Windows
Personalize
Users
Notifications
Search
Share
General
Privacy
Devices
Ease of Access
Sync your settings
HomeGroup
Windows Update
Spelling
Autocorrect misspelled words
On
Highlight misspelled words
On
Language
Add or change input methods, keyboard layouts, and languages.
Language preferences
Available storage
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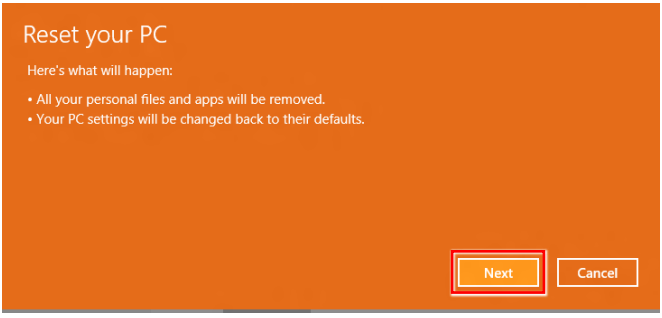
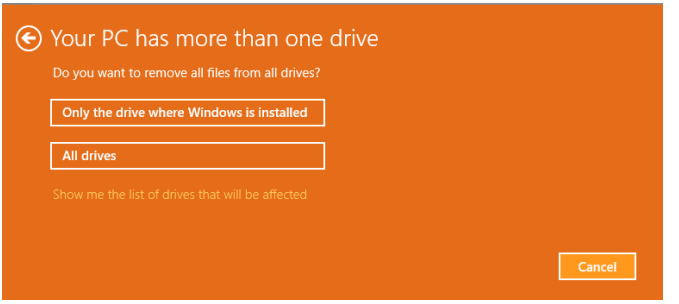
Get started
Advanced startup
Start up from a device or disc (such as a USB drive or DVD), change your PC's firmware settings, change Windows startup settings, or restore Windows from a system image. This will restart your PC.
Restart now

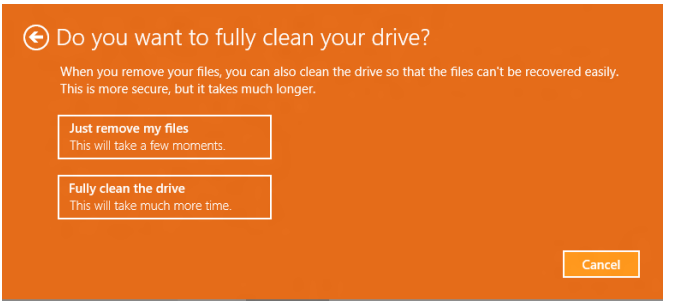
2. It will show the changes to be made during the process, click [Next] to continue.


Reset your PC
Here's what will happen:
• All your personal files and apps will be removed.
• Your PC settings will be changed back to their defaults.
Next
Cancel

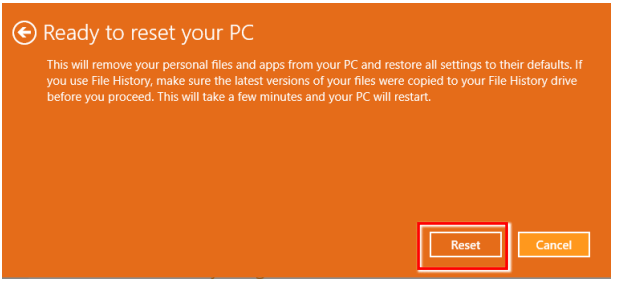
3. You will be prompted to choose which drive you want to clean for a hard disk with multiple partitions.


Your PC has more than one drive
Do you want to remove all files from all drives?
Only the drive where Windows is installed
All drives
Show me the list of drives that will be affected
Cancel

4. Now, select either to remove files or to fully clean drives according to your needs.


Do you want to fully clean your drive?
When you remove your files, you can also clean the drive so that the files can't be recovered easily. This is more secure, but it takes much longer.
Just remove my files
This will take a few moments.
Fully clean the drive
This will take much more time.
Cancel

5. It is now ready to reset your PC, click [Reset] and follow the on-screen instructions to restart your PC.


Ready to reset your PC
This will remove your personal files and apps from your PC and restore all settings to their defaults. If you use File History, make sure the latest versions of your files were copied to your File History drive before you proceed. This will take a few minutes and your PC will restart.
Reset
Cancel